# Landsat 7 Calibration Parameter File Release Version Description Document

01 April 2001



Earth Resource Observation Systems

Data Center

Sioux Falls, South Dakota

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# 1 Preface

This Calibration Parameter File (CPF) Change Description Document is controlled by the Landsat 7 Data Handling Facility (DHF) Change Control Board (L7 DCCB) and accompanies the release of CPFs for the 2nd Quarter of 2001.

Comments and questions regarding this document should be directed to:

Landsat 7 Image Assessment System Satellite Systems Branch USGS EROS Data Center Sioux Falls, SD 57198

# 2 Overview

This document details the Calibration Parameter Files (CPFs) released for the quarter beginning 01 April 2001 and the changes made to them.

# 3 Reason for CPF Issuance and Changes

This release is a routine quarterly release for the 2Q2001 CPF as well as changes to the Attitude Parameters which were updated from an alignment calibration completed for the period from launch to July 2000. The CPF's from July 2000 to the current one were updated to incorporate changes to the UT1 parameters.

# 4 List of CPFs in Effect

The following table shows the CPFs in effect at the end of the 1st Quarter 2001 and those valid for the 2nd Quarter of 2001. Note that only two of the 2Q2001 CPFs have been updated and a new CPF added for 2Q2001.

Period Covered	1Q2001 CPF Name	2Q2001
01 April 2001 – 30 June 2001	(n/a)	L7CPF20010401_20010630.01 (NEW)
01 January 2001 – 31 March 2001	L7CPF20010101_20010331.01	L7CPF20010101_20010331.02 (NEW)
01 October – 31 December 2000	L7CPF20001001_20001231.02	L7CPF20001001_20001231.03 (NEW!)
19 July - 30 September 2000	L7CPF20000719_20000930.04	L7CPF20000719_20000930.05 (NEW!)
01 July - 18 July 2000	L7CPF20000701_20000718.03	L7CPF20000701_20000718.04 (NEW!)
01 April - 30 June 2000	L7CPF20000401_20000630.03	L7CPF20000401_20000630.04 (NEW!)
01 January - 31 March 2000	L7CPF20000101_20000331.05	L7CPF20000101_20000331.06 (NEW!)
09 December - 31 December 1999	L7CPF19991209_19991231.06	L7CPF19991209_19991231.07 (NEW!)
24 November - 08 December 1999	L7CPF19991124_19991208.06	L7CPF19991124_19991208.07 (NEW!)
01 October – 23 November 1999	L7CPF19991001_19991123.06	L7CPF19991001_19991123.07 (no change)
01 July - 30 September 1999	L7CPF19990701_19990930.09	L7CPF19990701_19990930.10 (NEW!)
01 April - 30 June 1999	L7CPF19990401_19990630.12	L7CPF19990401_19990630.13 (NEW!)

# 5 List of Changed Units

# 5.1 New Additions to CPF File Structures:

There were no changes to the CPF file structure with any of the CPFs released this quarter.

# 5.2 Modifications to Existing CPF Values

The following changes were made to those CPFs newly generated or modified this quarter.

# 5.2.1 File: L7CPF20010401\_20010630.01

This is an initial of this CPF to cover this new quarter. The contents are based on the CPF file from 1Q2001 (File: L7CPF20010101\_20010331.01) with the following changes:

# 5.2.1.1 GROUP= UT1 TIME PARAMETERS

Predicted UT1 time values were populated into this new cpf. This is the only change to this CPF from the previous quarter.

#### 5.2.1.2 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

#### 5.2.2 File: L7CPF20010101\_20010331.02

Changes made to the .01 version of this CPF include the following groups:

#### 5.2.2.1 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

Routine changes to show new filename

# 5.2.2.2 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 5.2.3 File: L7CPF20001001\_20001231.03

Changes made to the .02 version of this CPF include the following groups:

# 5.2.3.1 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory Routine changes to show new filename

# 5.2.3.2 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

#### 5.2.4 File L7CPF20000719 20000930.05

Changes made to the .04 version of this CPF include the following groups:

#### 5.2.4.1 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

# 5.2.4.2 GROUP=FILE\_ATTRIBUTES

Routine changes to show new filename

#### 5.2.5 File <u>L7CPF20000701 20000718.04</u>

Changes made to the .03 version of this CPF include the following groups:

# 5.2.5.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

#### 5.2.5.2 GROUP= UT1 TIME PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

# 5.2.5.3 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 5.2.6 File <u>L7CPF20000401 20000630.04</u>

Changes made to the .03 version of this CPF include the following groups:

#### 5.2.6.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

# 5.2.6.2 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

#### 5.2.6.3 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 5.2.7 File L7CPF20000101 20000331.06

Changes made to the .05 version of this CPF include the following groups:

#### 5.2.7.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

# 5.2.7.2 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

# 5.2.7.3 GROUP=FILE\_ATTRIBUTES

Routine changes to show new filename

# 5.2.8 File <u>L7CPF19991209 19991231.07</u>

Changes made to the .06 version of this CPF include the following groups:

# 5.2.8.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

# 5.2.8.2 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

# 5.2.8.3 GROUP=FILE\_ATTRIBUTES

Routine changes to show new filename

#### 5.2.9 File <u>L7CPF19991124 19991208.07</u>

Changes made to the .06 version of this CPF include the following groups:

# 5.2.9.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

#### 5.2.9.2 GROUP= UT1 TIME PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

#### 5.2.9.3 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 5.2.10 File <u>L7CPF19991001 19991123.07</u>

Changes made to the .06 version of this CPF include the following groups:

#### 5.2.10.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

#### 5.2.10.2 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

#### 5.2.10.3 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 5.2.11 File <u>L7CPF19990701 19990930.010</u>

Changes made to the .09 version of this CPF include the following groups:

#### 5.2.11.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

# 5.2.11.2 GROUP= UT1\_TIME\_PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

# 5.2.11.3 GROUP=FILE\_ATTRIBUTES

Routine changes to show new filename

# 5.2.12 File L7CPF19990401 19990630.13

Changes made to the .12 version of this CPF include the following groups:

# 5.2.11.1 ATTITUDE PARAMETERS

An alignment calibration had indicated changes to this CPF files attitude parameters.

#### 5.2.11.2 GROUP= UT1 TIME PARAMETERS

UT1 parameters have been updated to incorporate changes from predicted values to actual measured values as computed at the Naval Observatory

#### 5.2.11.3 GROUP=FILE ATTRIBUTES

Routine changes to show new filename

# 6 Operational Changes to be expected with New CPFs

Due to an alignment calibration that was recently conducted, slight modifications have been made to the Attitude Parameters. Users may notice an improvement on the order of 10 to 30 meters in the across scan direction, for data collected between launch and July 18, 2000. The UT1 parameters have been very slight, and no appreciable difference can be noted from these updates.